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Chemical Processors, Inc.
Waste Analysis Plan
Pier 91 Facility

PIER 91

SEATTLE, WASHINGTON 98119

September 26, 1986

USEPA RCRA



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I. Introduction to the Waste
Analysis Plan for the Pier 91 Facility

INTRODUCTION TO THE WASTE ANALYSIS PLAN FOR THE PIER 91 FACILITY

This plan documents the procedures Chemical Processors, Inc. utilizes at its Pier 91 facility, to characterize waste streams received for treatment and/or storage.

The Pier manages various wastes which range from non-hazardous to dangerous classifications. The nature of the oil recycling process dictates which waste can be treated, and/or recycled into a product which meets the required specifications for recycled oil.

A generator submits a waste sample which is managed through the attached Profile System. The plan includes Wastes Parameters and Process Tolerance Limits. For the ease of reference, A Facility Description, Process Summaries, Waste-tracking and Check-in Procedures are included in the Appendices. The information package supplied to the generators (Referenced in the Waste Profile System) is also included for additional information.

APPENDIX I

FACILITY DESCRIPTION

Location

The Pier 91 facility is a former U.S. Naval facility located on the northern waterfront of Elliott Bay. More specifically, it is located within approximately one quarter mile of Smith Cove and the Smith Cove Waterway, both of which are part of Elliott Bay. Pier 91 has developed a prominent marine bunkering and marine recycling terminal. A major portion of the 8,000,000-gallon complex is leased as a marine fuel depot by Pacific Northern Oil.

Services Provided

Chemical Processors' primary service activity conducted at Pier 91 is waste oil reclamation. The maximum capacity of Chemical Processors' operations at Pier 91 is 3.5 million gallons. Waste oil is rendered re-usable by means of tank treatment and is currently sold to Pacific Northern Oil as cutting stock in marine oils. Pier 91 treats large quantities of bilge and ballast waters which are received via barge and tanker. Liquid industrial wastes are also received at the facility and treated to remove metal and organic contaminants.

Usual operations at Pier 91 include six to ten employees working two shifts, five days per week. The schedule and number of employees may vary according to the market conditions.

APPENDIX II

PROCESS SUMMARIES

Oils, industrial wastewater and coolants are wastes which are treated, as needed, by one or more of the treatment processes described below. Flow charts of the treatment processes are also provided.

Thermal/Chemical Treatment

Demulsification

The demulsification of emulsified liquids or oils occurs in Tanks 105, 107 or 110. These tanks have a capacity of 42,000 gallons. Emulsified coolant is isolated in Tank 112. The temperature of the emulsion is raised to approximately 190°F and is treated with calcium chloride. The treated wastewater is subsequently analyzed for pH, phenol and Cr₆ prior to transfer to wastewater treatment Tanks 90, 94, 96, 97, 98 or 100. The sludges derived from the treatment of the emulsified liquids are transferred to one of Tanks 106, 108, 109 or 111.

Waste Oil Treatment

Waste oil received with a higher BS&W content (25-30%) requires treatment in Tanks 105, 107 and 110. The treatment for waste oil involves indirectly heating the waste to approximately 190°F and treated with sodium silicate for sediment and water removal. The oil is pumped to Tank 99 for blending and resale. Residual sludge is transferred to Tanks 106, 108, 109 or 111 for dewatering.

Chemical Oxidation and Reduction

Upon receipt and verification of phenol contaminated oil or water, the waste stream is isolated in Tanks 115, 116, 117 or 165 and is treated in Tank 112. The treatment of phenol-contaminated oil or water involves chemical oxidation by use of sulfuric acid, ferrous sulfate and Hydrogen Peroxide or potassium permanganate.

Chemical reduction treatment occurs in Tanks 115, 116, 117, 165 or Rec Tank. Reduction is the treatment used to reduce waste containing concentrations of hexavalent chromium to trivalent chromium. Wastes loads with high metal concentrations are also treated by pH adjustments, clarification and precipitation in Tanks 96, 97, 98, 90, 94 and 100.

The pH of the load is initially reduced to 2-3 using sulfuric acid. The pH is then readjusted for metals precipitation by use of sodium hydroxide to attain a pH of approximately 9.5 to 10.5. Residual sludges are transferred to Tanks 106, 108, 109 or 111 for dewatering and wastewater is analyzed to assure that it meets Metro discharge permit standards. Reduction of chrome 6 is accomplished by use of sodium metabisulfite.

Coolant Treatment

Upon receipt and verification of a coolant waste, it is isolated for storage in Tanks 115, 116, 117 or 165. Batches of coolant are treated as needed in Tank 112 with a sulfonate modifier, flocculants, caustic and calcium chloride. The wastewater after treatment is pumped to Tanks 96, 97, 98 and 100 for subsequent treatment and/or discharge. Treated oil is transferred to Tanks 105, 107 and 110. Sludges are then pumped to Tanks 106, 108, 109 or 111.

Physical Treatment

Oil Water Separation

A 40,000-gallon oil/water separator receives incoming industrial wastewater. These wastes are only transferred to the oil/water separator after each incoming load has been analyzed for Cr₆, phenol, pH and emulsification. The flashpoint is also checked on loads of wastes which are contaminated with solvents.

Gravity Dewatering

Gravity dewatering of oil occurs in tanks where oily sludge is stored, i.e., tanks 106, 108, 109 and 111. Excess water is pumped to Tanks 96, 97 or 98 for water treatment prior to discharge to Metro sewer. Oil that has been dewatered is pumped to Tank 99 prior to resale.

Centrifugation

Centrifugation in a variable speed centrifuge provides for dewatering and concentrating of sludges. Wastes requiring centrifugation include oily sludges received at the facility and sludges from plant treatment processes, including sludges from Tanks 106, 108, 109 and 111. Water removed from the sludge is returned to the wastewater storage and treatment Tank 96, 97, 98 and the dewatered sludge is drummed and shipped for disposal.

II. Waste Profile System

THE PROFILE SYSTEM

Introduction

Each generator requesting treatment, storage or disposal at Chemical Processors, Inc. must complete a waste profile sheet for each individual waste stream. The waste profile sheet is reviewed by Regulatory Affairs, Operations and the Laboratory prior to acceptance and management designation. The review process will result in an approved Chemical Processors waste profile, and complete the remaining cycle outlined by the waste analysis plan, or be rejected with recommendations for alternative disposal options (if available).

The purpose of the waste profile system is multifaceted. The information required to complete a waste profile sheet ensures regulatory compliance, proper storage and treatment designations, waste verification, waste identity, and the specific source of the waste (generator and generating process).

The waste profile system provides:

- Confirmation of the identity of a waste prior to acceptance at the facility;
- Assurance of the Waste's compatibility with the facility's handling, storage, and treatment methods; and
- the identification of any unusual hazards a waste may have, which may require special adjustments to any handling or processing steps the facility must perform to properly manage the waste stream at the facility.

The waste profile system is applied to all incoming waste streams,* with variations for the waste streams listed below:

- a. Labpacks, and
- b. Out-of-date or off-specification wastes which have remained in their original, unopened and/or sealed containers.

These two waste streams are exempt from the "sample for waste verification requirement" but must still be profiled, providing a packing list for the lab packs and a material safety data sheet or exact chemical composition formulation for the out-of-date and/or out-of-specification products.

Responsibility for the maintenance of the waste profile system lies with the Sales Department. Information gathering, distribution and filing of the waste profile sheets is administered by Sales.

Regulatory Affairs is responsible for initially ensuring the facility is permitted to manage the waste, after which the waste profile sheet is examined for complete and correct information such as: proper DOT shipping and packaging information, waste code identity, signatures, EPA I.D. number (if required), generator's name and address, and the generating process.

The Laboratory is responsible for sample management and waste verification. The verification of the waste stream depends on the waste's characteristics. The Laboratory examines the sample by performing required analysis for that specific type of waste, and then compares the results to the information provided by the waste profile sheet. Any discrepancies are discussed between the Laboratory and Sales. Sales then discusses the discrepancies

with the generator and the generator may choose from the following options: to amend his/her waste profile sheet; provide further information; perform more laboratory analysis; or find alternate disposal methods. After the discrepancies (if any are resolved, the Laboratory assigns the fingerprint analysis which operations will need to perform during the check-in procedure.**

Operations is responsible for reviewing the information provided by the generator and the Laboratory, and designates the proper disposal method, storage or treatment. If at the time a treatment procedure (if required) is not available, Operations is responsible for recording that information.

Regulatory Affairs is responsible for the final review of the form to ensure: proper waste designation and identification; that the facility is permitted to handle the waste and to perform the assigned treatment or disposal method; and to finalize the acceptance or rejection of the waste profile sheet.

There are some wastes which Chemical Processors is permitted to manage, but chooses not to, due to a lack of proper treatment methods, or treatment methods which are in the development state. These wastes are addressed in the following "Restricted Wastes" section.

- * Due to the historical knowledge of the waste generating processes of one of our major customers, Chemical Processors, Inc. manages these familiar waste streams through managerial supervision rather than the conventional waste profile system. The waste streams are managed by the customer's specialized personnel who are in constant, direct contact with Chemical Processors' staff in all departments (e.g. the laboratory, regulatory affairs, and operations management). The waste streams are monitored for the waste parameters outlined in Section V during preacceptance and on incoming loads.

** See Appendix III.

Restricted Wastes

One of the main tasks of the waste profile system is to identify any waste streams which Chemical Processors, Inc. is restricted (by permit or lack of a proper handling procedure) from handling.

In rare cases, a waste which is restricted, but exempt from regulation, may arrive at the facility. Instead of putting the waste back on the highway, the waste will be held at the Chempro facility if immediate dispensation (within 24 hours) can be arranged through another facility or agency.

The specific waste streams which are restricted from management at Chemical Processors, Inc. are listed below.

General

- 1) Any radioactive materials
- 2) Any explosives
- 3) Any compressed gas cylinders
- 4) Any etiological wastes

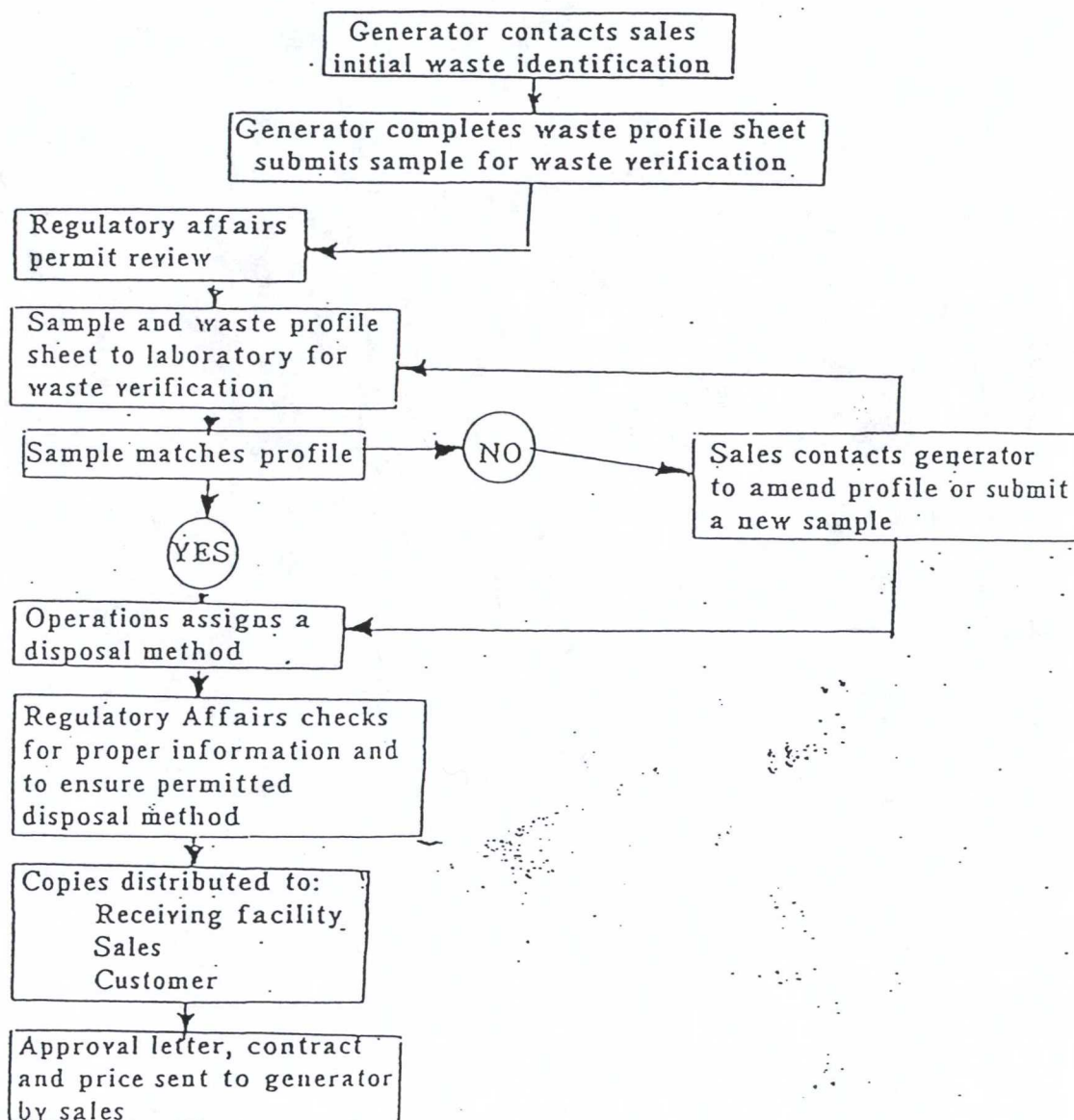
Specifics

Hydrazine (greater than 1% solutions)
Nitroglycerine compounds
Flashpoint < 140°F
Polychlorinated Biphenyls > 50 ppm

Flow Chart

The attached flow chart outlines the steps a waste profile sheet will follow for approval or rejection. Each department must participate in the profile system to complete the cycle. Each approved profile is reviewed annually, requiring updated information on the generating process and/or the waste constituents. A new representative sample is submitted and follows the flow chart path. The forms used to document the information obtained by the waste profile system are in Appendix I.

WASTE PROFILE SHEET FLOW CHART



Explanations of the Flow Chart Steps

- 1) A generator contacts Sales for information. After a brief interview, Sales will provide the generator with all the forms and guidelines necessary to initiate the waste profile system.
- 2a) When the generator receives the waste profile sheet, he/she must complete each section (where applicable) to the best of his/her ability. Sales, Operations, the Laboratory or Regulatory Affairs can assist the generator in completing the waste profile sheet accurately. The generator must submit (with the completed waste profile sheet) a representative sample (approximately one pint) for waste verification analysis performed by the Lab.
- 2b) An approval form (see Appendix I) is attached to the waste profile sheet as it progresses through the waste profile system.
- 3) The sample is stored in a storage cabinet until Regulatory Affairs reviews the waste profile sheet to ensure Chemical Processors is permitted to manage the waste.
- 4) When the initial review by Regulatory Affairs is complete, the waste profile sheet and the sample are analyzed by the Laboratory for waste verification. The analysis is attached to the profile and provides the acceptance or rejection on the approval form. The Laboratory accepts or rejects the sample on the basis of matching it to the information provided on the waste profile sheet.
- 5a) If the sample matches the profile, the profile will continue on to Operations. Operations will review the waste profile sheet and assign a disposal method. Operations will note any special handling or packaging requirements necessary to properly manage the waste on the approval form.
- 5b) If the Laboratory determines the sample does not represent the waste profile sheet, the profile is rejected. Sales will contact the generator and either amend the profile or request a new sample.
- 6) The final approval step is a final perusal by Regulatory Affairs. The waste profile sheet is reviewed one more time for completeness and compliance by all departments.
- 7) When the waste profile sheet is approved, copies are distributed to the receiving facility, Sales' files and the generator. Along with the profile, the generator will receive an approval letter from Sales noting the required annual review and/or notification of any process changes, and a contract.

Review and Repetition of Initial Waste Profile Analysis

Chemical Processors routinely reviews all active (recurring shipments) Waste Profiles on an annual basis. Wastes which are received less frequently than once per year are reanalyzed upon receipt. Review of a profile consists of contacting the generator to identify any changes in the process generating the waste, followed by the laboratory verification and review steps described above.

Generators are formally notified that in the event of a change in the process generating particular waste, they must advise Chemical Processors. In such an event, the waste profile is reviewed.

If, during screening, a shipment is determined to be outside of acceptable boundary condition limits, discrepancy procedures (see Appendix III, "Check-In Procedures") will be followed. These procedures include a review of the Waste Profile. If any abnormality occurs at our facility during waste handling, such as fume generation or equipment deterioration or other incident, the waste profile will be reviewed.

III. Identification of Wastes To Be Managed

IDENTIFICATION OF WASTES TO BE MANAGED

General waste types managed at the Pier 91 Facility include the following:

- Oils
- Oily Sludges
- Emulsified Oil and Water
- Oily Water
- Coolant
- Non-Oily Water

The sources, general contaminants and treatment processes for these waste types are summarized in the following table.

IDENTIFICATION OF WASTES MANAGED AT PIER 91

Type of Waste	Typical Source(s)	General Characteristics/ Contaminants	Treatment Process
Oils	Industrial and Service Station Waste Oils	Water Metals Sediments (Dirt, Scale) Trace Solvents	Thermal/Chemical Treatment
Oily Sludges	All Plant Processes Bilge/Ballast Water	Water Metals Trace Solvents Sediments (Dirt, Scale, Wood)	Dewatering Centrifugation Water Treatment
Emulsified Oil & Water	Soap/Detergent Caustic Liquid Mixed, Agitated Oil	Water Oil Sediment (Dirt, Scale Wood) Trace Solvents	Thermal/Chemical Treatment
Oily Water	Bilge/Ballast Water On-Site Stormwater Oily Run-off Water	Oil Metals	Oil/Water Separator Chemical Treatment
Coolant	Industrial Equipment Uses	Water Oil Phenol Hexavalent Chrome	Isolation Chemical Treatment Blending (Oil) Water Treatment
Non-Oily Wastewater	- Paint Hanger Rinse Water - Spent Plating Bath Solution (from Tacoma) - Sump Water	Trace Solvents Metals Phenol	Isolation (Phenol) Chemical Treatment Water Treatment

IV. Process Tolerance Limits

Treatment Procedure

Oil/Water Separator

Thermal Treatment

Demulsification

Waste Oil Treatment

Chemical Oxidation

Chemical Reduction

Gravity Dewatering

Centrifugation

Water Discharge (Post Treatment)

Tolerance Limits

pH 5-9

Cr₆ - negative

Phenol - negative

Emulsification - negative

Flash Point: > 140°F

PCB Screen < 50 ppm

Emulsification - positive

BS&W 25-30%: Treatment

BS&W ≤ 10% Oil Storage

BS&W < 5% Panoco Oil Storage

PCB Screen < 50 ppm

Phenol - positive

Cr₆ - positive

No Tolerance Limits

No Tolerance Limits

Metro Discharge Permit Standards

Oil & Grease 100 ppm

pH 5.5 - 12.5

Cd 3.0 mg/l

Cr 6.0 mg/l

Cu 3.0 mg/l

Ni 6.0 mg/l

Pb 3.0 mg/l

Zn 5.0 mg/l

Special Handling Requirements for Reactive, Ignitable or Incompatible Wastes

The Pier 91 Facility is permitted to receive a select group of wastes which must be compatible with tank container materials, and must fall within the specifications of the oil processed by the Pier.

Although the Pier 91 Facility is permitted by the Part A to manage Reactive and Ignitables, these wastes do not meet the specifications of materials which are compatible with the Pier's operations. Therefore, if the waste exhibits these characteristics during the

pre-acceptance process, the wastes are not assigned to the Pier for treatment and/or disposal.

The pre-acceptance screening also eliminates any wastes which are incompatible with the Pier's specifications.

If the wastes which are permitted to go to the Pier arrive at the facility, and do not meet the specifications represented by the Profile System, the load will be rejected, and with the generator's permission, returned to the generator or taken to an alternate facility.

V. Waste Parameters To Be Monitored

WASTE PARAMETERS TO BE MONITORED

Analysis of Generator Samples

Waste sample verification provides operations and regulatory review personnel with requisite information that either confirms that a generator's sample matches the characteristic information supplied on the accompanying waste profile sheet or that discrepancies exist between indicated information and actually determined sample characteristics. Specific analysis on the supplied generator sample is done in accordance with the following analytical rationale; all samples are subjected to all or part of the mandatory analysis tests.

Mandatory Analysis Includes:

<u>Details</u>	<u>Applicability</u>
1. Physical Description	Applies to all wastes.
2. BS&W	Applies to all oil wastes to determine bottom sediments and water contamination.
3. Emulsifier Screen	Applies to all water wastes to determine whether waste contains emulsified oil.
4. Phenol Screen	Applies to coolants and waste water.
5. Hexavalent Chromium Screen	Applies to waste water and coolants. Standard methods 312B excluding correction for major interferences.
6. pH	Applies to aqueous wastes to indicate corrosive nature.
7. Solvent Screen	Applies to all waste to determine chlorinated solvent contamination.
8. PCB Screen	Applies to oil to determine presence of PCB's.
9. Ignitability Screen	Applies to oil wastes as determined by Pensky-Martens closed up tester or use of flame test for approximate ignitability range.

USAGE OF MANDATORY ANALYSIS TEST

Incoming Load/Test	Physical Description	BS&W	Emulsifier Screen	Phenol Screen	Hexavalent Chromium	pH	Solvent Screen	PCB Screen	Ignitability Screen
Pre-Acceptance	o				o	o	o		o
Wastewater	o		o	o	o	o			
Coolants	o			o	o	o	o		
Oil	o	o	o				o	o	o

o Test provides characterization and/or processability information.

Supplemental Information

Supplemental information to characterize a waste will be obtained when it is deemed appropriate to provide said information, for safe and proper handling, or processing of a waste, to operations personnel. Chemical Processors uses chemists, and/or regulatory and operations management personnel to assess the need for waste supplemental information. This procedure review provides information to be used as follows:

- o Cross-check of analytical data submitted on waste profile.
- o Determination of waste characteristic to select appropriate treatment.
- o Set control parameters for proper treatment, storage and disposal.
- o Select "fingerprint" control parameters for incoming waste.
- o Develop safety guidelines for handling wastes.

Supplemental Analysis Includes:

Details	Applicability
1. GC Scan for Solvents	Applies to all oil wastes which meets the criteria limits, of WAC 173-303-515. (b)(ii).
2. PCB Analysis	Applies to all oil wastes which fails the PCB screen test.
3. Density	Applies to oil wastes for specification of oil and for solvent screen test data.

- | | | |
|----|--------------------------|--|
| 4. | Sulfide Screen | Applies to oil sludges requiring disposal for proper classification of waste. |
| 5. | Pentachlorophenol Screen | Applies to waste suspect of containing pentachlorophenol compounds and meeting criteria of WAC 173-303-9904 (F027). |
| 6. | GC Scan for Metals | Applies to waste oil at the discretion of the technical reviewer(s) to meet criteria limits of WAC 173-303-515 for arsenic and lead. |

Waste Sampling and Analysis

The goal of our process sampling program is to obtain representative samples of incoming material to determine whether it conforms to the facility's specifications for treatment of waste oils and materials. The program additionally provides information necessary to treat the waste.

Sampling is done by plant personnel who have been given proper training in sampling and/or waste screening methods.

Equipment and Methods

Sampling is done limited to tanks, tanker trucks, and barge tanker. Chemical Processors uses principles of sampling method presented in SW-846 (Reference #5).

SAMPLE EQUIPMENT

<u>Vessel Type</u>	<u>Sampler</u>	<u>Reference (SW-846)</u>
Tank or Tanker	Metal Tube	--
	Dipper	1.2.1.3
	Transfer - Random	1.1.3
Barge	Weighted Bottle	1.2.1.2

Metal Tube Sampler

Description of Apparatus -	Metal Tube of 1/2" - 1" diameter with or without cone tipped end, 4 feet or more in length, constructed of carbon or stainless steel.
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Procedure

1. Slowly lower the tube into the waste at a rate that allows the level of the sample inside the tube to remain the same as the level outside the tube.
2. When the tube is 75% of its length into the to be sampled material plug the end of the tube.

3. Withdraw the tube and wipe the outside with a disposable cloth or rag.
4. Deposit the sample into an appropriately sized container by removing the stopper and tapping the tube to dislodge the sample from the tube.
5. Seal and label the sample container.
6. Clean the tube if no additional samples of the same material is to be taken. Use toluene to flush both inside and outside and let dry.

Transfer - Random

Description - Sample is taken from the line used to transfer material. The line needs to have an appropriate sample nipple and valve. Take random grabs from the first half and second half of the vessel transfer. The samples should be of near equal volumes when combining to make the composite sample.

Weighted Bottle

Procedure - The weighted bottle sampler is used for sampling barge loads of material. The weighted bottle is dropped into each compartment of the barge and allowed to drop to a random level within the liquid level. At this sampling point the bottle's cork is removed and the sample taken. The compartment samples are either composited or analyzed individually.

Sample Containers and Frequency

Samples are taken from all incoming shipments and stored for analysis in a container constructed of material compatible with the sampled material. Containers are constructed to be liquid tight and range in size from 100 ml to 1000 ml constructed of either polypropylene or polyethylene plastic, or quart metal cans with lids. Samples are labeled with a unique identification number for easy container/sample correlation.

Analytical Methods and Rationale

The analytical methods employed in the Chemical Processing Laboratory are based on principles of the standard methods referenced in the following table. The test methods for each waste parameter are selected upon review of available technical methods published in the Standard Methods for the Examination of Water and Wastewater, EPA developed standard methods, published qualitative screening tests, or in-house developed qualitative screening test. In some cases the special characteristics of a particular material requires adaptation of a procedure to obtain the appropriate degree of accuracy needed to evaluate whether the material is permitted, or processable by Chemical Processors.

Due to limitations in laboratory personnel and fluctuating process demands, non-routine and PCB samples which cannot be handled in-house are sent to outside laboratories which have been reviewed and found to meet quality assurance screening by laboratory personnel.

WASTE PARAMETER CHARACTERIZATION.

Parameter	Analytical Method	Detection Limit	Rationale for Parameter Selection
pH	pH Meter or Test Paper Method 9040 (SW-846) Page 30, Reference #3	0.5 - 13.5	Verification of Waste and Corrosivity Measure
Flash Point	Pensky-Martens Closed Cup Method Method 1010 (SW-846), ASTM D93	70°F - 200°F	Verification of Waste
Hexavalent Chromium	Diphenylcarbazide Method 7196 (SW-846), Standard Methods 312B	0.5 mg/l	Verification of Waste
Phenol Screen	Photometric Method, Method 9065, Standard Methods 510C	0.5 mg/l	Verification of Waste and Treatability
Solvent Screen	Microcoulometric Method RTI Draft Report 472U-3251 "Evaluation of Methods for Determining Chlorine in Used Oils" - 1986	1.0 mg/l	Classification of Waste and Treatability
PCB Screen	Clor-N-Oil Test - Dexsil Co. Sodium Fusion Method	1.0 mg/l	Classification of Waste and Treatability
Bottom Sediment and Water	ASTM D96-73	N/A	Treatability
Emulsion Screen	Flocculation Test Using Alum & NaOH or Ferric Chloride & NaOH	N/A	Verification of Waste and Treatability
Ignitability	Flame Test - Page 39 Reference #3	N/A	Verification of Waste and Treatability
Sulfide Screen	Lead Acetate Method, Standard Methods 427	0.25 mg/l	Treatability and Classification of Waste Reactivity
GC Scan - Solvents	GC Method (SW-846)	1.0 mg/l	Treatability of Waste
PCB Analysis	GC Method - EPA Method 8952	2.0 mg/l	Verification of Waste and Treatability
Lead	Atomic Absorption Method 7420 (SW-846), Standard Method 316A	0.2 mg/l	Treatability of Waste
Arsenic	Atomic Absorption Method 7060/7061	2.0 mg/l	Treatability of Waste

VI. References

REFERENCES

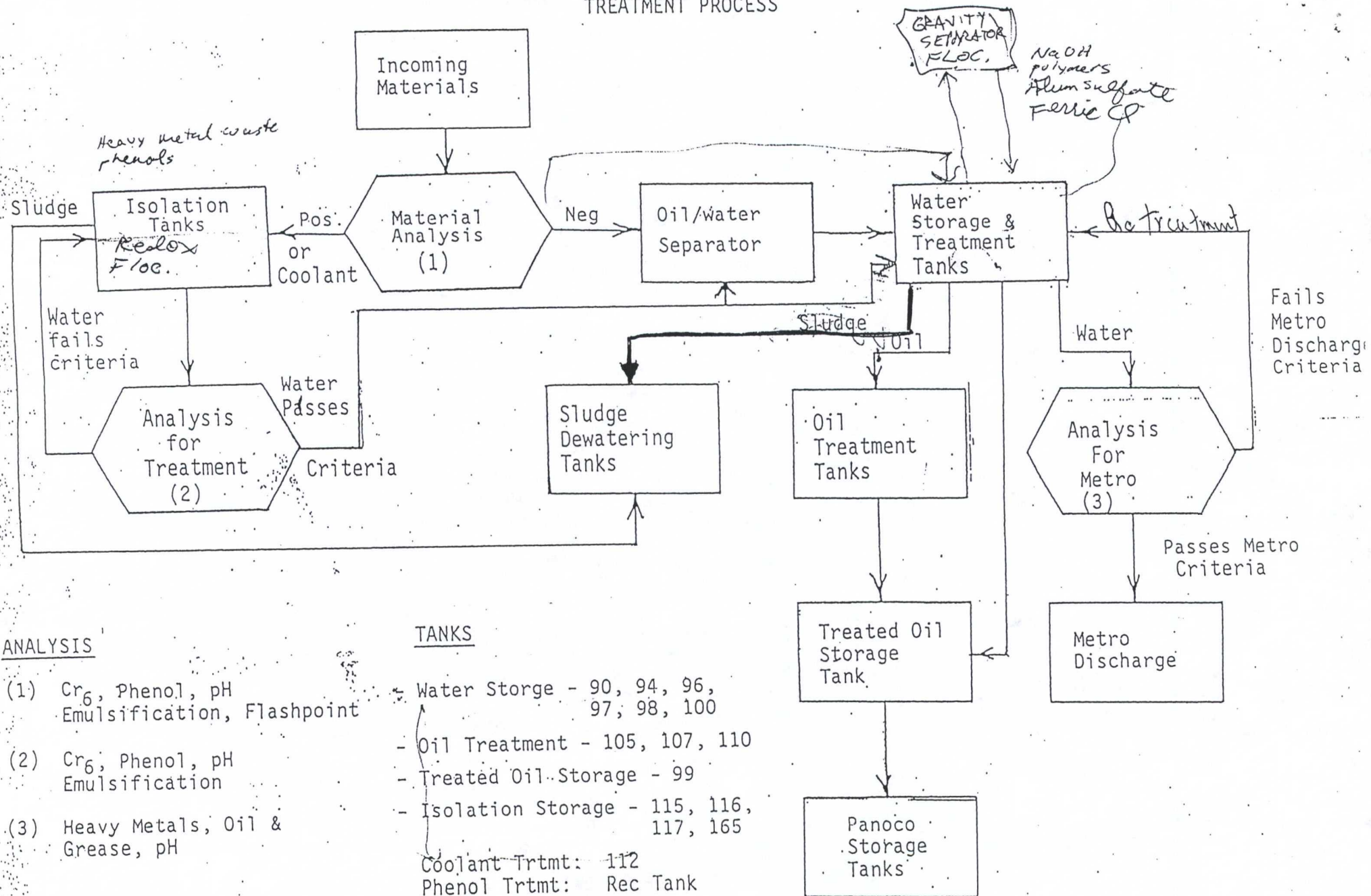
1. Waste Analysis Plans: A Guidance Manual. EPA/530-SW-84-012, U.S. Environmental Protection Agency, Office of Solid Waste, Washington D.C., 1984.
2. A Method for Determining the Compatibility of Hazardous Wastes. EPA-600/2-80-076, U.S. Environmental Protection Agency, Cincinnati, Ohio, 1980.
3. Design and Development of a Hazardous Waste Reactivity Testing Protocol. EPA-600/2-84-057, U.S. Environmental Protection Agency, Cincinnati, Ohio, 1984.
4. Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264. SW-968, U.S. Environmental Protection Agency, Washington, D.C., 1983.
5. Test Methods for Evaluating Solid Waste. Physical/Chemical Methods. SW-846, 2nd edition + amendments, U.S. Environmental Protection Agency, Washington D.C., 1982, 1984.
6. Chemical Testing Methods, Washington State Department of Ecology, 1982, 1983 1984.
7. Standard Methods for the Examination of Water and Wastewater. 15th ed., APHA-AWWA-WPCF, Washington D.C., 1981.
8. ASTM: American Society for Testing and Materials, Various Standards: Sampling, Distillation, GC/TC, Philadelphia.
9. Prudent Practices For Disposal of Chemicals From Laboratories, 1st ed., National Academy of Sciences, National Academy Press, 1983.

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10. Dangerous Properties of Industrial Materials. 5th ed., N. Irving Sax, Van Nostrand Reinhold, New York, 1979.
11. The Merck Index. 9th ed., Merck & Co., Rahway, New Jersey, 1976.
12. Registry of Toxic Effects of Chemical Substances. R.L. Lewis & D.V. Sweet, NIOSH, Cincinnati, updated quarterly.
13. Clinical Toxicity of Commercial Products. 4th ed., R. E. Gosselin, H. C. Hodge, R. P. Smith, M. N. Gleason, The Williams & Wilkins Co., Baltimore, 1976.
14. Handbook of Environmental Data on Organic Chemicals. Karel Verschueren, Van Nostrand, New York, 1977.
15. NFPA.

APPENDICES

OILY AND NON-OILY WASTEWATER AND COOLANT, TREATMENT PROCESS



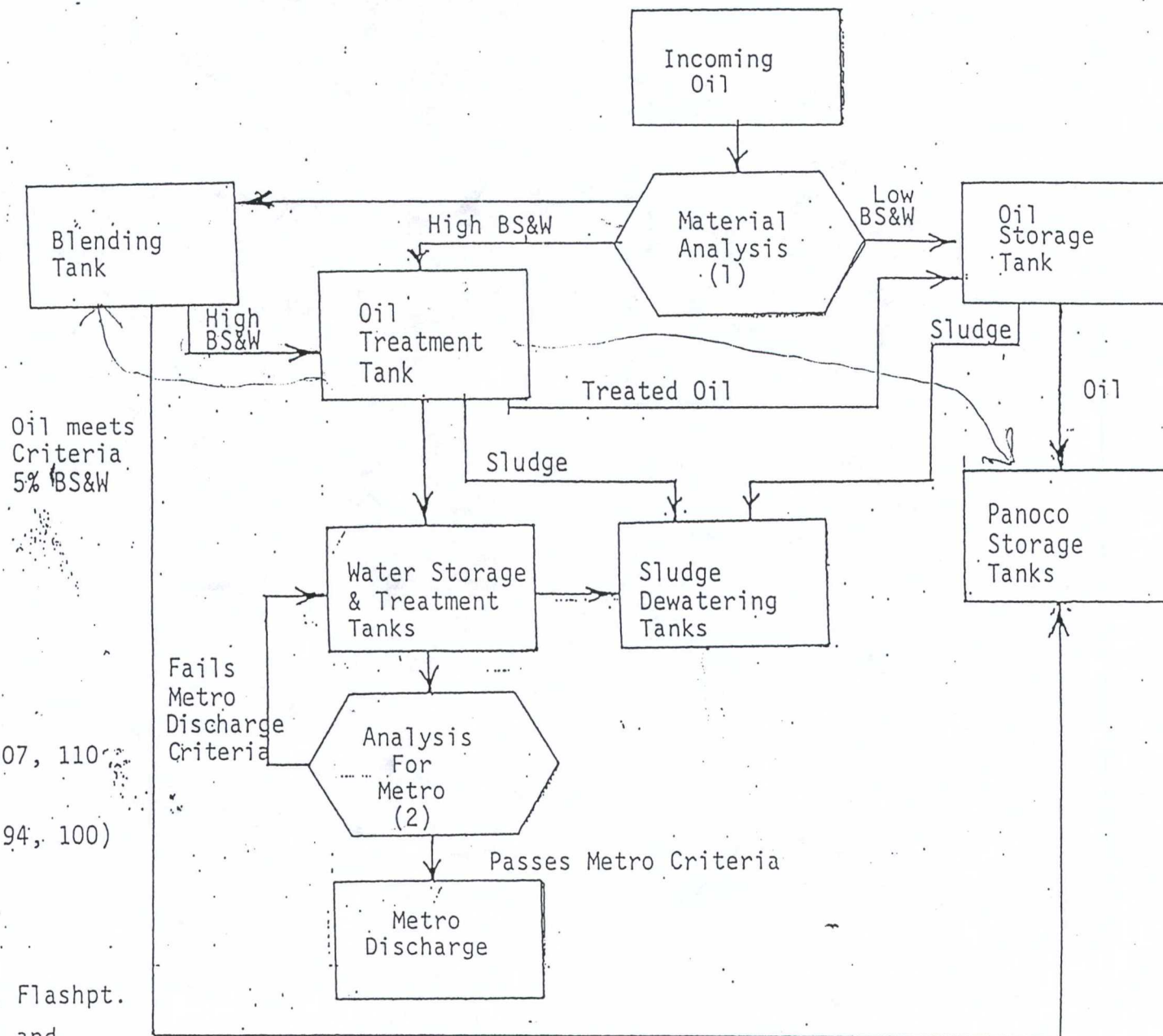
ANALYSIS

- (1) Cr_6 , Phenol, pH
Emulsification, Flashpoint
- (2) Cr_6 , Phenol, pH
Emulsification
- (3) Heavy Metals, Oil & Grease, pH

TANKS

- Water Storage - 90, 94, 96, 97, 98, 100
- Oil Treatment - 105, 107, 110
- Treated Oil Storage - 99
- Isolation Storage - 115, 116, 117, 165
- Coolant Trtmt: 112
- Phenol Trtmt: Rec Tank
- Isolation Storage & Treatment Emulsified Liquids: 105, 107, 110
- Sludge Dewatering: 106, 108, 109, 111

WASTE OIL TREATMENT PROCESS



TANKS :

Oil Storage: 99
 Oil Treatment: 105, 107, 110
 Water Storage & Treatment: 96, 97, 98 (90, 94, 100)
 Blending: 114

ANALYSIS

- (1) BS&W, PCB Screen, Flashpt.
- (2) Heavy metals, oil and grease, pH

OILY SLUDGE TREATMENT PROCESS

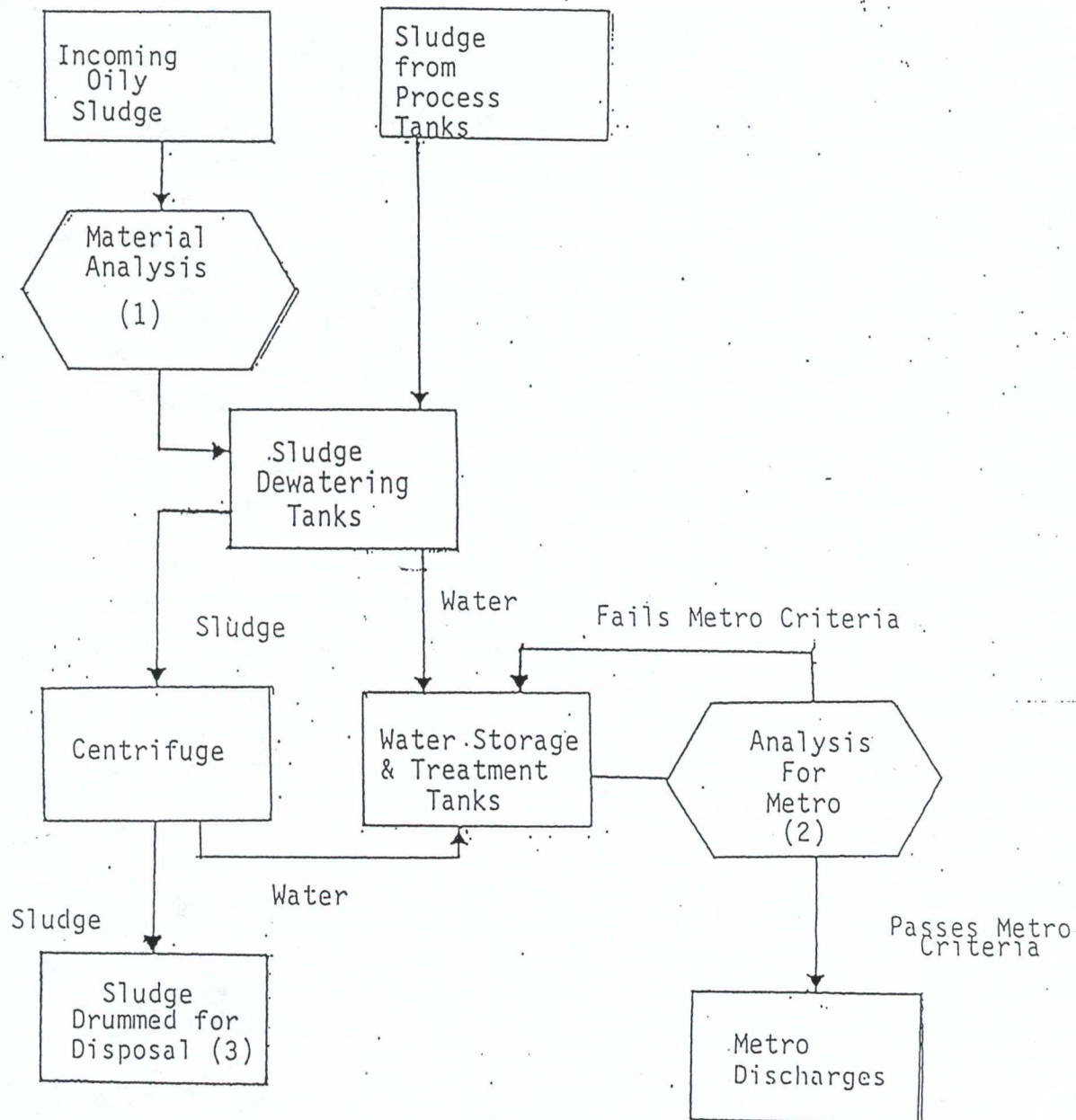
TANKS

Sludge Dewatering: 106, 108, 109, 111

Water Storage & Treatment: 96, 97, 98 (90, 94, 100)

ANALYSIS

- (1) BS&W
- (2) Heavy metals, oil & grease, pH
- (3) Hazardous waste characterization



APPENDIX III

CHECK-IN PROCEDURE

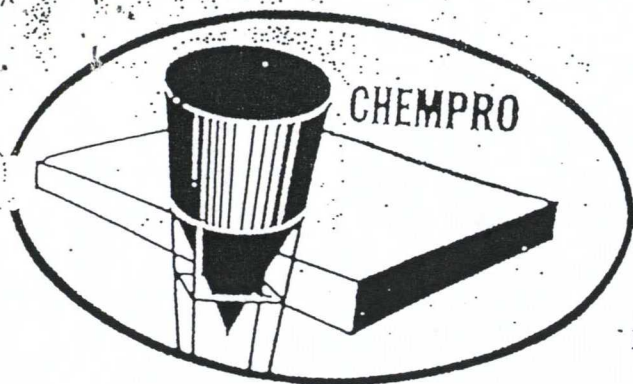
The major purpose of the Check-In Procedure is to confirm the content of each shipment matches the identity of the waste specified on the manifest.

The manifests are kept at the facility for three years and are the major portion of the record keeping system.

The Check-In Procedure is accomplished by following the steps listed below.

1. The manifest is examined to ensure all the required DOT, EPA and WDOE information is recorded properly. If a problem or discrepancy is discovered, the operator refers to the "Problem Manifest Procedure."
2. When a bulk load arrives at the Pier 91 facility, a representative sample is taken for fingerprint analysis.*
3. The operator completes a waste receipt with the following information: Generator Name; Volume; Tank Number; Fingerprint Analysis Results; and attaches it to the manifest.
4. If the fingerprint analysis verifies the load matches the information on the manifest and meets the waste specifications required by the Pier, the waste is transferred to a tank.
5. The waste transfer is recorded on the tank log for that tank.
6. If the waste requires further treatment or must be transferred to another tank, each transfer is recorded on the respective tank log. (See attached.)
7. If the fingerprint analysis proves the waste does not meet the Pier 91 facility's specification, the load is rejected and either returned to the generator, or with the generator's permission, transferred to an alternative facility.

* See page 16 for Mandatory Analysis.



CHEMICAL PROCESSORS, INC.
5501 AIRPORT WAY SO.
SEATTLE, WASHINGTON 98108

PHONE: (206) 767-0350

Revised date: June 24, 1986

PROBLEM MANIFESTS PROCEDURE

Operations

Sales

Reg. Affairs

[Handwritten signatures]
[Signature]
[Signature]
[Signature]

Problem Manifests Procedure

INTRODUCTION

The recordkeeping system requirements specified by 40 CFR and WAC 173-303-370 for facility operators include a section specifically for the manifest system.

The purpose of this procedure is to set criteria for manifest discrepancies, unmanifested wastes and rejecting a shipment.

A. MANIFEST DISCREPANCIES

Manifest discrepancies are significant discrepancies between quantity or type of hazardous waste and/or dangerous waste designated on the manifest and type or quantity a facility actually receives.

Significant discrepancies in quantity are variations greater than ten percent in weight for bulk quantities (e.g., tanker trucks, railroad tank cars, etc.), or any variations in piece count for nonbulk quantities (i.e., any missing container or package would be a significant

discrepancy). Significant discrepancies in type are obvious physical or chemical differences which can be discovered by inspection or waste analysis (e.g., waste solvent substituted for waste acid).

A discrepancy must be reconciled within 15 days.

Steps To Manage A Manifest Discrepancy

1. As soon as a discrepancy is discovered, Operations should contact the generator by telephone to inform the generator of the discrepancy. If there is a question about whether or not a discrepancy exists, Operations should contact Regulatory Affairs for verification.
2. Operations shall ask the generator for permission to correct the manifest to match the load. When permission is received, operations shall make the necessary corrections and initial each correction. Any correction made shall be entered on all copies of the manifest received by the facility.
3. Immediately after the corrections are entered and initialed, the discrepancy space on the manifest (#19) must be completed with the following information.
 - a. What the discrepancy is.
 - b. A statement to the effect that "on day/month/year (name of person contacted) gave permission to correct the discrepancy stated above".
 - c. Full signature of Operations personnel correcting discrepancy and date.
4. If the load consists of drums, and the discrepancy is a type of waste, the drum must be relabelled and marked (prior to storage) to match the corrected manifest and the corrected waste stream.

5. If Operations cannot reach the generator or the discrepancy is abnormal, notify Regulatory Affairs. Regulatory Affairs will work with Sales and Operations to insure the discrepancy is resolved within the allowed time frame (15 days).

B. UNMANIFESTED LOADS

An unmanifested load, is any load delivered to the facility without a manifest; on a bill of lading; or with missing information required by Generator's Standards 40 CFR.

Steps To Manage An Unmanifested Load

1. Operations shall contact Regulatory Affairs immediately if a load is received without a manifest.
2. Regulatory Affairs, Operations and Sales will determine whether to accept or reject the load.
3. If the load is accepted, an unmanifested waste report form (see appendix B) must be completed by Operations and filed with the WDOE by Regulatory Affairs.

C. REJECTING A SHIPMENT

If a shipment arrives at one of Chempro's facilities and cannot be managed properly at that facility as determined by Plant Management and Regulatory Affairs to:

1. Notify him/her of the rejection.
2. To obtain instruction from the generator whether to send the shipment back to the generator or to another designated facility.

Examples of loads which cannot be managed properly are:

1. Waste which is not listed on the respective facility's Part A Permit.
2. A load which does not match the manifest, and the waste cannot be stored or disposed of at that facility.

WAC 173-203-180 Manifest. Before transporting dangerous waste or offering dangerous waste for transport off the site of generation, the generator shall prepare a manifest and shall follow all applicable procedures described in this section.

(1) This subsection describes the form and contents of dangerous waste manifests. Until September 20, 1984, the manifest must meet the requirements of either (a) or (b) of this subsection. On September 20, 1984 and thereafter, all manifests must meet the requirements of (b) of this subsection, and (a) of this subsection will no longer be in effect.

(a) Required information for manifests. The manifest information requirements specified herein are only applicable until September 20, 1984. On September 20, 1984 and thereafter, manifests must be in the form and must contain the information required by (b) of this subsection. The manifest shall contain at least the following information:

- (i) A manifest document number;
- (ii) The generator's name, address, telephone number, and EPA/State identification number;
- (iii) The name, address, telephone number, and EPA/State identification number of each transporter used;
- (iv) The name, address, and EPA/State identification number of the designated receiving facility (such facility must be permitted to handle the waste identified on the manifest) and, if the generator so chooses, of an alternate facility permitted to handle the waste in the event an emergency prevents delivery to the primary designated receiving facility;
- (v) The total quantity of each dangerous waste, and type and number of containers identified by units of weight or volume to be received by the transporter;
- (vi) The description of the waste(s) as required by United States Department of Transportation (DOT) regulations, 49 CFR 172.101, 172.202, and 172.203, and, where such information would be useful in the event of a spill or discharge during transport, the approximate percentages of each waste component;
- (vii) Measures to be taken in case of accident, the National Response Center phone number, 1-800-424-8802, and the CHEM-TREC phone number, 1-800-424-9300;
- (viii) Such other information as required by the department to implement chapter 70.105 RCW; and
- (ix) The following certification, or an equivalent certification, on the manifest:

This is to certify that the above named materials are properly designated, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the United States Department of Transportation, EPA, and the Washington State Department of Ecology.

(b) Uniform dangerous waste manifest. The requirements specified herein are applicable to all manifests on and after September 20, 1984. 40 CFR Part 262 Appendix A - Uniform Hazardous Waste Manifest and

Instructions (EPA Forms 8700-22 and 8700-22A. Their Instructions) is adopted by reference. The first shall be EPA Form 8700-22 and, if necessary, Form 8700-22A. The manifest must be prepared in accordance with the instructions for these forms described in the uniform manifest Appendix of Part 262, and in addition must contain the following information in the specified shaded items of the manifest:

(i) Item D - The first transporter's telephone number must be provided in this space;

(ii) Item F - If a second transporter is used, the second transporter's telephone number must be provided in this space;

(iii) Item H - The designated receiving facility phone number must be provided in this space; and

(iv) Item I - The dangerous waste number (F001, D006, W002, P102) must be provided in the space for each corresponding waste entered as described under Item 11.

(2) The manifest shall consist of enough copies to provide the generator, transporter(s), and owner/operator with a copy, and a copy for return to the generator.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
H.W. Section R/6 M/S PV-11
Olympia, WA 98504-8711

FORM 6



DEPARTMENT USE ONLY

I. RECEIVING FACILITY INFORMATION

EPA/State I.D. #: _____ Facility Name: _____
Facility Address (incl. City, State, Zip): _____
Facility Contact Person: _____ Phone Number: () _____

II. GENERATOR INFORMATION

EPA/State I.D. #: _____ Generator Name: _____
Generator Address (incl. City, State, Zip): _____

III. TRANSPORTER INFORMATION

EPA/State I.D. #: _____ Transporter Name: _____
Transporter Address (incl. City, State, Zip): _____
Driver's Name: _____ Driver's License No.: _____ Stat: _____
Vehicle License No: _____ State: _____ ICC or Other License Numbers: _____

IV. WASTE INFORMATION

A. Date This Waste Shipment Received By Your Facility: _____

B. Identification of Waste(s)

H U M B E R	1	2	3	4	5	6			
	Physical State S-solid L-liquid G-sludge	Chemical Nature O-Organic I-Inorganic		Hand- ling Method Code.	Dangerous Waste Number				
1.			Description of Waste						
2.									
3.									

V. COMMENTS

VI. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry, I believe that the submitted information is true, accurate, and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment.

PRINT OR TYPE NAME

SIGNATURE

DATE SIGNED

14- 2250

To: Name _____ P.O. _____

Waste Generator: Name _____

Hauler: Name _____

Comments: _____ BS & W .
 _____ Chrome ☐ Pos. ☐
 _____ Phenol ☐ Pos. ☐
 _____ pH

Chemical Processes

[illegible]

APPENDIX IV

TANK LOG PROCEDURES (WASTE TRACKING SYSTEM)

Waste Receipt and Input Log

In addition to the manifest or shipping papers provided for incoming wastes, a waste receipt is completed upon acceptance of the waste. The date, waste receipt number, manifest number, generator number, analytical results and quantity are recorded on the receipt. This information is then transferred to the tank input log.

Tank storage and treatment of received waste is also identified in the input log. An operations log provides a record of the time a waste load was received in addition to operational records.

The quantity of wastes in tanks is determined by the measurement of tank waste levels. Waste levels in tanks are gauged twice daily. A gauge tape is used to measure the outage and the measurement is recorded on the gauge sheet (see attached). Maximum fill heights for each tank are indicated on the gauge sheet.

DAILY GAGES

OPERATOR _____

DATE: _____

TIME: _____

TANK / GAGE HT. ACT. HT. TX. COND. LINE STATUS TREATMENT

102	11'6"			RED LINE
103	11'6"			
106	11'6"			WHITE LINE
107	11'6"			
108	11'6"			BLUE LINE
109	11'6"			
110	11'6"			GREEN LINE
111	11'6"			
112	11'6"			IND. LINE
114	19'0"			
115	25'11"			TREATMENT CHEMICALS
116	26'4 3/4"			FERRIC CHLORIDE
117	25'9"			CALCIUM CHLORIDE
118	21'8"			ALUM
119	30'3 1/2"			CAUSTIC
120	26'0"			PEROXIDE
121	31'6"			PERMANGANATE
122	31'0"			FERROUS SULFATE
123	29'11 1/2"			SULFURIC ACID
124	29'11 1/2"			SODIUM
125	29'11 1/2"			METABOLITE
126	30'2"			METER READINGS
REC. S.	3'5"			POTABLE WATER
PLY. SEP.	18'5"			STEAM

ADDITIONAL COMMENTS:

Appendix V

GENERATOR INFORMATION COMPILATION

The generator can obtain initial information about Chemical Processors, Inc. and the potential for disposal of their waste streams with the Sales Department. The information package which is provided to the generator is attached.

An initial telephone interview reveals the general information required to identify whether or not Chemical Processors, Inc. can properly manage the waste stream. The information package can be mailed to the generator or the generator may make an appointment to visit the office and complete the necessary paperwork. The package contains: an introduction letter; general outline of procedures; instructions on "How to take a sample"; waste profile sheet guidelines; a blank waste profile sheet; and a notification of dangerous waste activities application (better known as an EPA identification number application), if required.

If a generator has "lab pack" chemicals, he will receive in addition to the forms listed above, "Guidelines for the disposal of small containers of liquid and solid hazardous wastes-labpacks."

After the waste profile sheet completes the approval cycle, an "approved packet," including prices and a contract, will be sent to the generator. The letter documents whether the waste stream has been accepted or rejected. As an additional service to our customers, a blank hazardous waste manifest, and "Guidelines for the preparation of hazardous waste manifests" is sent to the generator at this time, if the waste has been approved for disposal at Chemical Processors, Inc. The guidelines contain a disclaimer due to the frequent changes which occur in the regulation of the waste tracking system. These forms are attached in Appendix I.

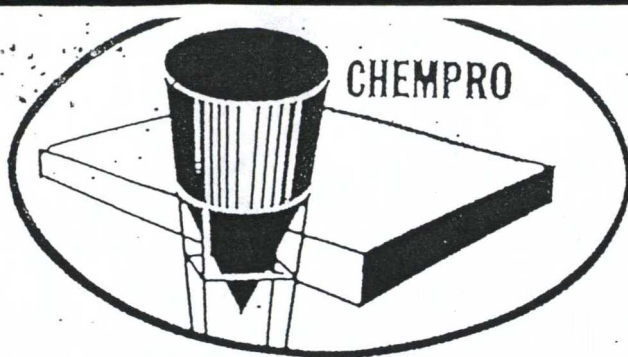
Under certain circumstances, a site visit may be required to properly manage a waste stream. This is dictated by the size of the generator, and/or the size of the waste stream, the complexity of the management required for that waste stream, or by a request from the generator. The site visits are performed by an Outside Sales person qualified to make judgments about proper waste management. If requested, Chemical Processors, Inc. can supply trained personnel to perform the following tasks:

- 1) Proper and representative sampling
- 2) Lab pack organization, segregating, packaging
- 3) Generating process verification in the rare instance that a sample cannot be obtained or that requirement is waived.

REGULATORY AFFAIRS/OPERATIONS

Regulatory Affairs reviews the waste profile sheet to ensure Chemical Processors, Inc. is permitted to manage the waste in the manner necessary for proper treatment, storage and disposal (i.e., drum storage, tank storage, consolidation, solidification, etc.).

After the Laboratory performs the required waste verification analysis, and accepts the sample as representative of the waste profile sheet, the approval form is signed off. The profile moves to Operations for review and a disposal method assignment. Operations may ask for additional information from Sales, the generator, Regulatory Affairs, or the Laboratory in order to designate the best disposal method. Any special handling or shipping requirements are recorded at this time by Operations on the approval form. The profile then is sent to Regulatory Affairs for the final approval and assessment. When the approval form is signed by the Laboratory, Operations and Regulatory Affairs, and all the stipulations made by each department are agreed to by the generator, the profile is considered approved. Copies of the waste profile sheet are distributed to Sales, the assigned facility and the generator. Upon arrival, a sample of the first shipment is obtained and a "fingerprint analysis" is performed on that sample, by the Operations Laboratory. The waste profile sheet and the fingerprint analysis are compared. Any discrepancies must be immediately managed at this time (see discrepancy procedures).



CHEMICAL PROCESSORS, INC.

5501 AIRPORT WAY SO.

SEATTLE, WASHINGTON 98108

PHONE: (206) 767-0350

Dear

The waste material described in the profile sheet(s) has been reviewed by Chempro.

WPS# _____

This material is acceptable for recycling and/or disposal. Chempro has the appropriate permit(s) for, and will accept this waste. This is in accord with WAC 173-303-290.

Enclosed you will find two copies of a contract agreement if you do not already have one in place, and/or the pricing information for this material, and a credit application. Both copies of the pricing sheets and/or contracts need to be signed and returned to Chempro. Unless you already have a credit application on file, or are working on a cash basis, it will be necessary for you to get credit approval before any shipment will be accepted.

Also enclosed is a uniform hazardous waste manifest, one of which must accompany every shipment to Chempro. This is a federal document with state requirements included, and must be filled out correctly. In addition, there are guidelines on packaging and labeling, and if needed, labels.

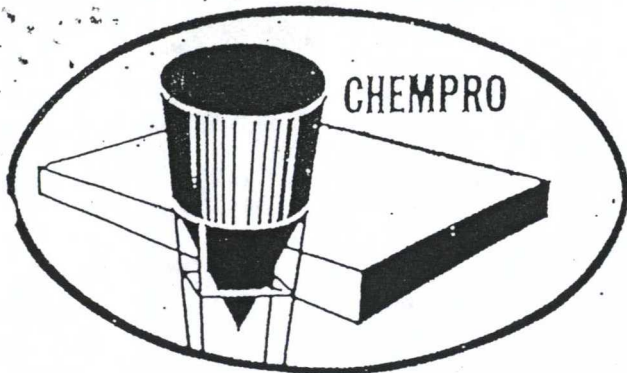
If you have any questions, please call the Sales office at (206) 767-0350.

Sincerely,

Kay Eberle
Kay Eberle
Sales & Marketing

FAC

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator's US EPA ID No.	Manifest Document No.	22. page	Information in the s arees is not require law.	
23. Generator's Name			L. State Manifest Document Num			
			M. State Generator's ID			
24. Transporter _____ Company Name		25. US EPA ID Number		N. State Transporter's ID		
				O. Transporter's Phone		
26. Transporter _____ Company Name		27. US EPA ID Number		P. State Transporter's ID		
				Q. Transporter's Phone		
28. DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			29. Containers No.	Type	30. Total Quantity	31. Unit Wt./Vol.
a.						
b.						
c.						
d.						
e.						
f.						
g.						
h.						
i.						
Additional Description for Materials Listed Above			Handling Codes for Wastes Listed			
32. Special Handling Instructions and Additional Information						
TRANSPORTER	33. Transporter _____ Acknowledgement of Receipt of Materials					
	Printed/Typed Name			Signature		
	34. Transporter _____ Acknowledgement of Receipt of Materials					
	Printed/Typed Name			Signature		
FACILITY	35. Discrepancy Indication Space					



CHEMICAL PROCESSORS, INC.

5501 AIRPORT WAY SO.

SEATTLE, WASHINGTON 98108

PHONE: (206) 767-0350

Dear


Chemical Processors would like to thank you for inquiring about our company's possible service to you. Chempro is actively engaged in the management and transportation of commercial and industrial waste products, oils and solvents. We have the capability to offer treatment, reclamation, recycling and/or disposal of your waste streams(s). Chempro operates three state and federally permitted TSD facilities.

In order for Chempro to determine what service we can offer your company, certain information is requested. Please fill out the enclosed waste profile sheet correctly, and return it to us with a one pint representative sample of your waste.

A general outline of procedures has also been enclosed to give you an idea of what is required in order for Chempro to handle your waste material.

If you have any further questions, require any information about the waste profile, sampling or any of Chempro's procedures, please call our Sales office at 767-0350.

Sincerely,


Kay Eberle
Sales & Marketing

CHEMICAL PROCESSORS, INC.
GENERAL OUTLINE OF PROCEDURES

1. Obtain a Generator's Waste Material Profile Sheet from Chempro and fill it out COMPLETELY. Please be aware that if this form is not complete or is incorrectly filled out, it will be returned to you for resubmittal.
2. Send the completed profile to Chempro with a representative sample of the material it describes. Samples may be sent via UPS or delivered to us at 5501 Airport Way South. If samples are delivered please do not bring samples into the office, leave them in your car. Bring profile sheet(s) into the office only! Sales will review profile(s) and then you will be instructed how to bring your sample in. This is for the safety of our non-technical office staff.
3. Chempro will evaluate the sample and advise you as to the material's acceptability. This can take anywhere from one to four weeks.
4. Once a profile is approved, you will receive two copies of the "Waste Transportation and Management Agreement". This is our contract, and includes pricing information for the approved profile(s). Both copies need to be signed and returned to Chempro for our signature. This agreement is not in effect until it is signed by both the generator and Chempro. Chempro will not accept any material without this agreement in force.
5. Chempro will also send you a credit application upon profile approval. Unless you are working on a cash basis, be sure you have credit approval BEFORE SHIPMENT.
6. Chempro requires that all shipments of hazardous waste to its facilities be accompanied by a Uniform Hazardous Waste Manifest. Make certain the manifest is properly filled out, signed, dated, and indicates the appropriate profile number for container shipments, all containers must meet D.O.T. specifications, must have a Hazardous Waste label and the proper D.O.T. Hazard Class sticker. Containers must be closed to the environment. Leaking containers cannot be legally transported.

FOR REPEATED SHIPMENTS of the same waste stream, resubmittal of the Generator's Waste Material Profile Sheet is not required. Once a waste stream has been approved by Chempro, all that is necessary is that you contact the transporter and have the material taken to the appropriate Chempro facility.

IF YOU HAVE ANY QUESTIONS, PLEASE CALL THE SALES OFFICE AT:
(206) 767-0350

PLEASE BE AWARE THAT THESE ARE CHEMPRO'S CURRENT POLICIES AND ARE SUBJECT TO CHANGE AS CHANGES ARE MADE IN FEDERAL, STATE, AND LOCAL RULES AND REGULATIONS.

HOW TO TAKE A SAMPLE:

In most cases, a sample must accompany your Waste Profile Sheet (WPS). Certain commercial products, such as pesticides and herbicides do not require samples. Check with Chempro if you are not sure a sample is required.

Below is a check list to aid you in obtaining a correct sample:

- ☐ The sample must be representative. To be sure that all components of the waste are included in the sample, the waste should be agitated before dipping, or the tube method should be used.
- ☐ The sample should be one pint or less in quantity, and in a clean, non-leaking container with a screw-on lid.

The container is properly labeled with:

- ☐ Name of company
- ☐ Description of material
- ☐ The "CP" number for the top right corner of the Waste Profile Sheet to which it corresponds

Samples and WPS may be delivered to our offices or sent via United Parcel Service.

Chemical Processors
5501 Airport Way S.
Seattle WA 98108

IMPORTANT: If you choose to deliver the samples, leave them in your car; bring the Waste Profile Sheet ONLY into our office. Our Sales department will review the WPS and you will be instructed what to do with the samples. This is for the safety of our non-technical office staff.

WASTE PROFILE SHEET GUIDELINES

GENERAL INFORMATION

YOU are the generator.
 Transporter - if known at this time
 Facility address - where the waste is located. Add mailing address if different.
 Generator ID# - see Washington State Department of Ecology (DOE) Regulations.
 Technical contact - the person and phone number that Chempro may call for information.
 General description of waste.
 Process generating waste - what was it used for?

VISUAL DESCRIPTION

Color - general description
 Physical state - if it is a thick sludge, it is semi-solid
 Layers - when it sits, does it separate into one or more layers?
 Free Liquids - Liquids are 'yes', 100% - Solids are 'no' -- semi-solids are 'yes' and whatever percentage is liquid.
 PH - for corrosive materials and waste waters.
 Specific gravity - water is 1. Is this waste heavier or lighter?
 Flash Point - at what temperature will the material produce vapors that will ignite?

CHEMICAL COMPOSITION -- use ranges, but list 100% of components, not just hazardous ones.

TESTS -- does it contain metals? DO NOT LEAVE BLANK.

If "yes" give parts per million (ppm) - if "no" put -0- - if not tested use --.

OTHER COMPONENTS -- same as metals above.

SHIPPING INFORMATION

Proper shipping name--Hazard class--ID#--RQ--See Dept. of Transportation (49 CFR 172.101)
 Method of shipment - how will Chempro receive it.
 Anticipated volume - best estimate. This can be revised.

HAZARDOUS CHARACTERISTICS

Reactivity -- check which one or check 'none'.
 Other hazardous characteristics - check which one or check 'none'.
 EPA hazardous waste - check yes or no (See: Washington State DOE Regulations)
 Waste ID# - list appropriate numbers
 Tested for dangerous waste - Check 'no' unless you have results from Fish Bio Assay Test

IDENTIFICATION SIGNATURE - the person who fills out the form should sign
 SAMPLING METHOD - grab, dip, tube, etc.
 QUANTITY OF SAMPLE - no larger than 1 pint, EXCEPT oil should be 1 quart.
 SOURCE OF SAMPLE - container the sample was taken from.
 DATE - SIGNATURE - DATE -- person who took the sample.

Information on this form can be found on a Material Safety Data Sheet (MSDS) available from the manufacturer. If you cannot obtain sufficient information from a MSDS or other source, Chempro may require you to have an analysis from an analytical laboratory before processing your profile sheet.

FOR GENERAL GUIDELINES DESIGNED TO HELP YOU FILL OUT YOUR PROFILE SHEET. IF YOU HAVE OTHER QUESTIONS ABOUT FILLING OUT THIS FORM, PLEASE CALL OUR SALES OFFICE: 767-0350.

CHEMICAL PROCESSORS INC.
GENERATOR'S WASTE MATERIAL PROFILE SHEETCP NO. EX-100

A. GENERAL INFORMATION			
GENERATOR NAME <u>JOHN DOE COMPANY</u>		TRANSPORTER	
FACILITY ADDRESS <u>PO Box 6</u>		TRANSPORTER PHONE	
<u>SEATTLE, WA 98100</u>		GENERATOR EPA ID <u>WA1010101010101010</u>	
		GENERATOR STATE ID <u>SAME</u>	
TECHNICAL CONTACT <u>J.H. DOE</u>		TITLE <u>President</u>	
NAME OF WASTE <u>WASTE SOLVENT / PAINT</u>		PHONE <u>(206) 555-0000</u>	
PROCESS GENERATING WASTE <u>CLEANING PAINT BRUSHES</u>			
B. PHYSICAL CHARACTERISTICS			
PHYSICAL STATE & TYPE	LAYERS	FREE LIQUIDS	
COLOR <u>BROWN</u>	<input type="checkbox"/> SOLID <input type="checkbox"/> SEMI SOLID <input type="checkbox"/> MULTILAYERED <input type="checkbox"/> SINGLE PHASED	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO VOLUME <u>100</u>	
<input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> POWDER	<input checked="" type="checkbox"/> BILAYERED		
SH ID < 2	1. 7-10 <input checked="" type="checkbox"/> 11A	SPECIFIC GRAVITY	FLASH POINT
2. 7-4	10-12.5	8-10 <input checked="" type="checkbox"/> 13-17	70°F-100°F
3. 4-1-6.9	12.5	1.1-1.2	101°F-130°F
4. 7	EXACT	EXACT	130°F-200°F
C. CHEMICAL COMPOSITION (TOTALS MUST ADD TO 100%)			
<u>XYLENE</u>		<u>20-30</u>	
<u>PAINT</u>		<u>10-18</u>	
<u>WATER</u>		<u>0-2</u>	
D. METALS			
ARSENIC (AS)	TOTAL (PPM)	EPA EXTRACTION PROCEDURE (HGL)	
BARIUM (BS)	-0-	SILVER (S)	-0-
CADMIUM (CD)	-0-	COPPER (CU)	-0-
CHROMIUM (CH)	-0-	IRON (IR)	-0-
MERCURY (MR)	-0-	ZINC (ZN)	-0-
LEAD (PB)	5 ppm	THALLIUM (TH)	-0-
CHROMIUM (HE) (CR)	-0-		-0-
E. OTHER COMPONENTS - TOTAL (PPM)			
CYANIDES	-0-	PERCHLORATES	-0-
SULFIDES	-0-	PHENOLS	-0-
F. SHIPPING INFORMATION			
D.O.T. HAZARDOUS MATERIAL <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
PROPER SHIPPING NAME <u>WASTE XYLENE</u>			
HAZARD CLASS <u>FLAMMABLE</u> LD. NO. <u>UN1307</u> RQ. <u>1000</u>			
METHOD OF SHIPMENT: <input checked="" type="checkbox"/> BULK LIQUID <input type="checkbox"/> BULK SOLID			
X DRUM (TYPE/SIZE) <u>55 GAL</u>			
ANTICIPATED VOLUME <u>165</u> GALS. CUBIC FEET			
OTHER			
PER: <input type="checkbox"/> ONE TIME <input type="checkbox"/> WEEK <input checked="" type="checkbox"/> MONTH			
<input type="checkbox"/> QUARTER <input type="checkbox"/> YEAR			
G. HAZARDOUS CHARACTERISTICS			
REACTIVITY: <input checked="" type="checkbox"/> NONE <input type="checkbox"/> PYROPHORIC <input type="checkbox"/> SHOCK SENSITIVE			
<input type="checkbox"/> EXPLOSIVE <input type="checkbox"/> WATER REACTIVE <input type="checkbox"/> OTHER			
OTHER HAZARDOUS CHARACTERISTICS			
<input checked="" type="checkbox"/> NONE <input type="checkbox"/> RADIOACTIVE <input type="checkbox"/> ETIOLOGICAL			
<input type="checkbox"/> PESTICIDE MANUFACTURING WASTE <input type="checkbox"/> OTHER			
EPA/STATE HAZARDOUS WASTE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
WASTE ID# <u>D001</u>			
TESTED FOR DAUGHTER WASTE CRITERIA			
<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (ATTACH RESULTS)			
I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS IS COMPLETE AND ACCURATE AND THAT ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED			
AUTHORIZED SIGNATURE <u>J.H. Doe</u>		TITLE <u>President</u>	
		DATE <u>1/10/82</u>	
THE UNDERSIGNED CERTIFIES THAT HE/SHE OBTAINED A REPRESENTATIVE SAMPLE OF THE WASTE MATERIAL ABOVE REFERENCED AND THAT THE FOLLOWING REPRESENTATIONS ARE TRUE AND CORRECT.			
SAMPLING METHOD: <u>DIP</u>			
AMOUNT: <u>1 PT</u>			
SOURCE OF MATERIAL <u>DRUM</u>			
SAMPLED: <u>DRUM</u>			
NAME (PRINT) <u>Mary DOE</u>			
SIGNATURE: <u>Mary Doe</u>			
DATE: <u>1/10/82</u>			

PROFILE APPROVAL FORM

WPS NO# _____

GENERATOR NAME: _____

FACILITY ADDRESS: _____

LABORATORY EVALUATION

SAMPLE ACCEPTABLE

[] YES

[] NO

LAB NUMBER: _____

Comments: _____

INCOMING WASTE FINGERPRINT ANALYSIS REQUIRED

[] pH

[] Water Reactivity

[] Ignitability

[] _____

[] Cyanide Screen

[] Solvent Screen

[] Hexavalent Chromium

[] _____

RECOMMENDED DISPOSITION:

[] GEORGETOWN

[] PIER 91

[] TACOMA

[] OTHER: _____

Laboratory

Date

OPERATIONS EVALUATION

ACCEPTABLE FOR DISPOSAL

[] YES

[] NO

Comments: _____

Operations

Date

REGULATORY AFFAIRS

PERMITTED

[] YES

[] NO

Restrictions: _____

Regulatory Affairs

Date

CP No 087

NAME (Print): _____

SIGNATURE: _____